Listing of Claims:

Claims 1-29: (Canceled)

Claim 30. (Previously presented) A water purification apparatus comprising a water source and a hydrophilic membrane comprising one or more layers,

wherein said water source contains water and at least one of a suspended solid, a dissolved solid, a pollutant, a salt, and a biological material,

wherein said hydrophilic membrane allows the water to pass through the membrane as a vapor, said hydrophilic membrane preventing the at least one suspended solid, dissolved solid, pollutant, salt, and biological material from passing through the hydrophilic membrane,

further wherein said hydrophilic membrane permits a differential transfer of water vapor across said membrane at a rate of at least 70 $g/m^2/24h$.

Claim 31. (Previously presented) The apparatus of claim 30, wherein said water comprises a form selected from a vapor, a liquid, a mixture of vapor and liquid, and an aqueous emulsion.

Claim 32. (Previously presented) The apparatus of claim 30, wherein the water having the at least one suspended solid, dissolved solid, pollutant, salt and biological material removed therefrom is used in at least one process selected from irrigating agricultural land, watering a growing medium, humidifying an airspace of a growth chamber, providing potable water, and rehydrating dehydrated matter.

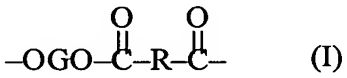
Claim 33. (Previously presented) The apparatus of claim 30, wherein a pressure differential exists across the hydrophilic membrane.

Claim 34. (Previously presented) The apparatus of claim 30, wherein a humidity differential exists across the hydrophilic membrane.

Claim 35. (Previously presented) The apparatus of claim 30, wherein the hydrophilic membrane is a hydrophilic polymer selected from a copolyetherester elastomer, a polyether-block-polyamide, a polyether urethane, a homopolymer of polyvinyl alcohol, a copolymer of polyvinyl alcohol, and mixtures thereof.

Claim 36. (Previously presented) The apparatus of claim 35, wherein the hydrophilic polymer is a copolyetherester elastomer, or a mixture of two or more said copolyetherester elastomers,

wherein said copolyetherester elastomer comprises a multiplicity of recurring long-chain ester units and a multiplicity of recurring short chain ester units, said long-chain ester units and short-chain ester units being joined head-to-tail by ester linkages, wherein the long-chain ester units have the general formula



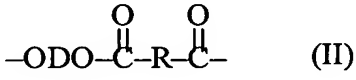
(I)

wherein:

a) G is a divalent radical remaining after terminal hydroxyl groups are removed from a poly(alkylene oxide)glycol having a number average molecular weight of about 400-4000;

b) R is a divalent radical remaining after carboxyl groups are removed from a dicarboxylic acid having a molecular weight less than 300;

wherein the short-chain ester units have the general formula



(II)

wherein:

a) D is a divalent radical remaining after hydroxyl groups are removed from a diol having a molecular weight less than about 250;

b) R is a divalent radical remaining after carboxyl groups are removed from a dicarboxylic acid having a molecular weight less than 300;

wherein the copolyetherester optionally contains from 0 to 68 wt.% ethylene oxide groups based on the total weight of the copolyetherester, said ethylene oxide groups being contained in the long-chain ester units; and

wherein the copolyetherester contains from about 25 to 80 wt.% of said short-chain ester units.

Claim 37. (Previously presented) The apparatus of claim 36, wherein the copolyetherester elastomer having a film thickness of 25 microns has a water vapor transmission rate according to ASTM E96-95 (procedure BW) of at least 400 $g/m^2/24hours$, said water vapor transmission rate being measured at an air temperature of 23°C, relative humidity of 50% and an air velocity of 3 m/s.

Claim 38. (Previously presented) The apparatus of claim 36, wherein the copolyetherester elastomer having a film thickness of 25 microns has a water vapor transmission rate according to ASTM E96-95 (procedure BW) of at least 3500 $g/m^2/24hours$, said water vapor transmission rate being measured at an air temperature of 23°C, relative humidity of 50% and an air velocity of 3 m/s.

Claim 39. (Previously presented) The apparatus of claim 30, wherein the water having the at least one suspended solid, dissolved solid, pollutant, salt and biological material removed therefrom is used in at least one process selected from germination of at least one plant seed, propagation of at least one organism selected from a plant, plant seed, plant seedling and mixtures thereof, and growth of at least one organism selected from a plant, plant seed, plant seedling and mixtures thereof.

Claim 40. (Previously presented) The apparatus of claim 30, wherein the membrane has a first surface adjacent a first volume and a second surface adjacent a second volume, said first surface being in contact with the water source,

wherein a humidity differential exists between the first and second volume, said humidity differential causing the water in the first volume to pass through the membrane and into the second volume,

wherein the water passes through the first and second surface of the membrane as a vapor, and

further wherein the at least one suspended solid, dissolved solid, pollutant, salt, and biological material is retained in the first volume by the first surface of the membrane.

Claim 41. (Previously presented) The apparatus of claim 40, wherein the second volume is an enclosed chamber.

Claim 42. (Previously presented) The apparatus of claim 40, further comprising a means for condensing the vapor present in the second volume.

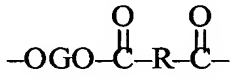
Claim 43. (Previously presented) A humidity augmenting apparatus for providing moisture to an airspace of an enclosed chamber comprising a water source and a hydrophilic membrane comprising one or more layers,

wherein said water source contains water and at least one of a suspended solid, a dissolved solid, a pollutant, a salt, and a biological material,
wherein said hydrophilic membrane allows the water to pass through the membrane and be emitted as vapor into an airspace of an enclosed chamber, said hydrophilic membrane preventing the at least one

suspended solid, dissolved solid, pollutant, salt, and biological material from passing through the hydrophilic membrane.

Claim 44. (Previously presented) The apparatus of claim 43, wherein the hydrophilic membrane is a hydrophilic polymer selected from a copolyetherester elastomer, a polyether-block-polyamide, a polyether urethane, a homopolymer of polyvinyl alcohol, a copolymer of polyvinyl alcohol, and mixtures thereof.

Claim 45. (Previously presented) The apparatus of claim 44, wherein the hydrophilic polymer is a copolyetherester elastomer, or a mixture of two or more said copolyetherester elastomers, wherein said copolyetherester elastomer comprises a multiplicity of recurring long-chain ester units and a multiplicity of recurring short chain ester units, said long-chain ester units and short-chain ester units being joined head-to-tail by ester linkages, wherein the long-chain ester units have the general formula



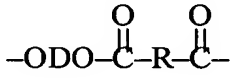
(I)

wherein:

a) G is a divalent radical remaining after terminal hydroxyl groups are removed from a poly(alkylene oxide)glycol having a number average molecular weight of about 400-4000;

b) R is a divalent radical remaining after carboxyl groups are removed from a dicarboxylic acid having a molecular weight less than 300;

wherein the short-chain ester units have the general formula



(II)

wherein:

a) D is a divalent radical remaining after hydroxyl groups are removed from a diol having a molecular weight less than about 250;

b) R is a divalent radical remaining after carboxyl groups are removed from a dicarboxylic acid having a molecular weight less than 300;

wherein the copolyetherester optionally contains from 0 to 68 wt.% ethylene oxide groups based on the total weight of the copolyetherester, said ethylene oxide groups being contained in the long-chain ester units; and

wherein the copolyetherester contains from about 25 to 80 wt.% of said short-chain ester units.

Claim 46. (Previously presented) The apparatus of claim 45, wherein the copolyetherester elastomer having a film thickness of 25 microns has a water vapor transmission rate according to ASTM E96-95 (procedure BW) of at least 400 g/m^2/24hours, said water vapor transmission rate being measured at an air temperature of 23° C, relative humidity of 50% and an air velocity of 3 m/s.

Claim 47. (Previously presented) The apparatus of claim 45, wherein the copolyetherester elastomer having a film thickness of 25 microns has a water vapor transmission rate according to ASTM E96-95 (procedure BW) of at least 3500 g/m^2/24hours, said water vapor transmission rate being measured at an air temperature of 23° C, relative humidity of 50% and an air velocity of 3 m/s.

Claim 48. (Previously presented) The apparatus of claim 43, wherein the enclosed chamber is a growth chamber.

Claim 49. (Previously presented) The apparatus of claim 48, wherein at least one plant is contained inside the growth chamber.

Claim 50. (Previously presented) The apparatus of claim 49, wherein the growth chamber is a greenhouse.

Claim 51. (Previously presented) The apparatus of claim 43, wherein at least one plant is contained inside the enclosed chamber.

Claim 52. (Previously presented) The apparatus of claim 43, wherein only part of the hydrophilic membrane is in contact with the airspace.

Claim 53. (Previously presented) The apparatus of claim 43, wherein the hydrophilic membrane is completely in contact with the airspace.

Claim 54. (Previously presented) The apparatus of claim 43, wherein the hydrophilic membrane is covered by a layer of light blocking support material.

Claim 55. (Previously presented) The apparatus of claim 54, wherein the support material is selected from woven paper, non-woven paper, bonded paper, fabric permeable to water vapor, and a screen permeable to water vapor.

Claim 56. (Previously presented) The apparatus of claim of claim 43, wherein said apparatus is placed in a darkened enclosure.

Claim 57. (Previously presented) The apparatus of claim 43, wherein said apparatus further comprises at least one opening for filling the apparatus with the water source.

Claim 58. (Previously presented) The apparatus of claim 43, wherein said apparatus is selected from a bag, a pipe, and a tube.

Claim 59. (Previously presented) The apparatus of claim 43, wherein a humidity differential exists across the hydrophilic membrane, said humidity

differential causing the water to pass through the membrane and be emitted as water vapor into the airspace of the enclosed chamber.

Claim 60. (Previously presented) A process for controlling humidity of an airspace in an enclosed chamber, comprising:

providing a water source containing water and at least one of a suspended solid, a dissolved solid, a pollutant, a salt, and a biological material,

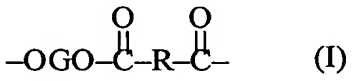
providing a water delivery system to an enclosed chamber, said water delivery system comprising a hydrophilic membrane comprising one or more layers, wherein said hydrophilic membrane prevents the at least one suspended solid, dissolved solid, pollutant, salt, and biological material from passing through the hydrophilic membrane, said water being permitted to pass through the hydrophilic membrane as water vapor, wherein said hydrophilic membrane has a differential transfer rate of water vapor across the hydrophilic membrane of at least $70g/m^2/24h$; and

introducing the water source to the water delivery system, wherein the water passes through the hydrophilic membrane to the enclosed chamber depending on the humidity of the chamber.

Claim 61. (Previously presented) The process according to claim 60, wherein the hydrophilic membrane is a hydrophilic polymer selected from a copolyetherester elastomer, a polyether-block-polyamide, a polyether urethane, a homopolymer of polyvinyl alcohol, a copolymer of polyvinyl alcohol, and mixtures thereof.

Claim 62. (Previously presented) The process according to claim 61, wherein the hydrophilic polymer is a copolyetherester elastomer, or a mixture of two or more said copolyetherester elastomers, wherein said copolyetherester

elastomer comprises a multiplicity of recurring long-chain ester units and a multiplicity of recurring short chain ester units, said long-chain ester units and short-chain ester units being joined head-to-tail by ester linkages, wherein the long-chain ester units have the general formula



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wherein:

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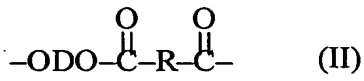
wherein the short-chain ester units have the general formula



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wherein:

a) D is a divalent radical remaining after hydroxyl groups are removed from a diol having a molecular weight less than about 250;
b) R is a divalent radical remaining after carboxyl groups are removed from a dicarboxylic acid having a molecular weight less than 300;

wherein the copolyetherester optionally contains from 0 to 68 wt.% ethylene oxide groups based on the total weight of the copolyetherester, said ethylene oxide groups being contained in the long-chain ester units; and

wherein the copolyetherester contains from about 25 to 80 wt.% of said short-chain ester units.

Claim 63. (Previously presented) The process according to claim 62, wherein the copolyetherester elastomer having a film thickness of 25 microns has a water vapor transmission rate according to ASTM E96-95 (procedure BW) of at least 400 g/m^2/24hours, said water vapor transmission rate being measured at an air temperature of 23° C, relative humidity of 50% and an air velocity of 3 m/s.

Claim 64. (Previously presented) The process according to claim 62, wherein the copolyetherester elastomer having a film thickness of 25 microns has a water vapor transmission rate according to ASTM E96-95 (procedure BW) of at least 3500 g/m^2/24hours, said water vapor transmission rate being measured at an air temperature of 23° C, relative humidity of 50% and an air velocity of 3 m/s.